

IN THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A synchronization system in digital communication, comprising:

a converter for receiving signals from a transmitter, and oversampling a single symbol interval into a plurality of subsamples;

a signal processor for classifying each symbol oversampled by the converter into a subsample group according to a sample phase, and performing signal processing to adjust processing speeds;

an integrator for removing noise from the signals output by the signal processor and performing integration during a predetermined time; and

a timing selector for selecting an optimal symbol synchronization point from among values output by the integrator, generating and outputting a symbol timing signal ~~and outputting it~~.

2. (Currently amended) The synchronization system of claim 1, further comprising a digital demodulator for receiving the symbol timing signal from the signal processor and the timing selector, generating and outputting a demodulation signal, ~~and outputting it~~.

3. (Original) The synchronization system of claim 1, wherein the signal processor comprises:

a sample arranger for classifying the oversampled signal output by the converter into a subsample group according to a sample phase within the symbol; and

an absolute value calculator for converting the subsample values output by the sample arranger into absolute values.

4. (Currently amended) The synchronization system of claim 1, wherein the signal processor comprises:

a sample arranger for classifying the oversampled signal output by the converter into a subsample group according to a sample phase within the symbol; and

a sign selector for selecting signals having only either sign from among the respective subsample values having positive and negative signs, the subsample values being output by the sample arranger.

5. (Original) A synchronization method in digital communication, comprising:

(a) receiving a signal from a transmitter, and oversampling a single symbol interval into a digital signal having a plurality of subsamples;

(b) classifying the oversampled signal in (a) into a subsample group according to a sample phase within a single symbol, and performing signal processing to adjust a processing speed; and

(c) removing noise from the signal-processed signal in (b), and performing integration during a predetermined interval, and selecting an optimal symbol synchronization point.

6. (Currently amended) The synchronization method in claim 5, wherein (c) comprises selecting the optimal symbol synchronization point, and generating and outputting a digital demodulation signal using the selected signal ~~and outputting it~~.

7. (Original) The synchronization method in claim 5, wherein the signal processing in (b) converts subsample values that are output after they are classified into the subsample group into absolute values.

8. (Original) The synchronization method in claim 5, wherein the signal processing in (b) selects signals having an either sign from among subsample values having positive and negative signs, subsample values being output after being classified into the subsample group.